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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,659	04/08/2005	Dirk Heukelbach	05587-00377-US	7080
23416 7590 02/23/2010 CONNOLLY BOVE LODGE & HUTZ, LLP P O BOX 2207 WILMINGTON, DE 19899				
EXAMINER NUTTER, NATHAN M				
ART UNIT		PAPER NUMBER		
1796				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/527,659

**Applicant(s)**

HEUKELBACH ET AL.

**Examiner**

Nathan M. Nutter

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-15, 17, 18 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-15, 17, 18 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

In response to the amendment filed 21 January 2010, the following is placed in effect.

The objection to claims 19 and 20 under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim, is hereby expressly withdrawn.

The rejection of claims 10, 11 and 18 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 7-9, 22 and 24-28 of U.S. Patent No. 6,921,563 (Goerlitz et al), is hereby expressly withdrawn in view of the acceptable Terminal Disclaimer filed 21 January 2010.

The rejection of claims 10, 11 and 18 under 35 U.S.C. 103(a) as being obvious over Goerlitz et al (US 6,921,563), is hereby expressly withdrawn in view of applicants' amendment.

Due to the inadvertent omission of claims 22-24 in the previous Office Action of 21 August 2009, this Office Action is not being made FINAL.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7-15, 17, 18 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda et al (US 5,876,814) in combination with Otoi et al (US 6,682,797) in view of Yamamoto et al (US 5,783,273) or Hirose et al (US 5,321,030).

The reference to Oda et al teaches the production of film and sheet like articles, including packaging materials and container articles, through vacuum molding techniques, using cyclic olefin copolymers in combination with other polyolefins, as herein recited. Note column 3 (lines 16-25), column 9 (lines 57-60) and Examples 1, 2 and 3 for the thermomolding techniques. The articles are taught to have a thickness of "preferably 5  $\mu\text{m}$  or more" at column 7 (lines 55-57) and a "thickness in total of from 80 to 600 $\mu\text{m}$ " at column 9 (lines 36-40). The cyclic olefin polymers (COC) employ identical monomers at column 4 (line 4) to column 6 (line 64), which possess glass transition temperatures embraced by those of the instant claims at 80° to 145°C and higher. These would include those recited in claims 23 through 26. Note the Abstract and column 2 (lines 23-35) which requires the "glass transition temperature ( $T_g$ ) 10°C or more higher than the temperature of said heat treatment." The use of an olefin comonomer is taught at the paragraph bridging column 6 to column 7. The reference teaches "(t)he molecular weight of the copolymer is not particularly restricted." The very broad number average molecular weight range of 500 to 2,000,000 is easily envisaged by the composition of the reference. Other unsaturated monomers may be employed for the COC at column 4 (lines 4-10). The heat of distortion would be above 121°C, as recited herein. Note the paragraph bridging column 7 to column 8 for the inclusion of other polymers, including polyolefins, in the production of film structures for packaging.

The reference to Oda et al does not provide any teaching of ranges for the heat distortion temperatures as recited in claims 10, 12 and 18, though the reference teaches the identical COC polymers. The heat of distortion for the reference polymers would be expected to be the same.

The Oda et al reference also fails to teach a suitable range of inclusion of additional polyolefin polymer.

The patent to Otoi et al shows the cyclic olefin copolymer blend with another polyolefin at 50 to 80% by weight at column 8 (lines 19-38). For 100 parts COC there may be added 100 parts by weight or less of polyolefin resin. The reference teaches the production of film and sheet like articles, including packaging materials and container articles, through vacuum molding techniques. Note column 9 (lines 31-44) of the patent for a disclosure of thermomolding. The cyclic olefin polymers (COC) employ identical monomers at column 4 (line 39) to column 5 (line 34), which possess glass transition temperatures embraced by those of the instant claims at 80° to 120°C and higher. Note column 10 (lines 41-57). The use of an olefin or other unsaturated comonomers is taught at column 5 (lines 21 et seq.). The reference teaches a weight average molecular weight of the copolymer to be "preferably 20,000 to 80,000," within that recited herein. The heat of distortion would be above 121°C, as recited herein. Note column 8 (lines 19-37) for the inclusion of other polymers, including polyolefins. The reference to Otoi et al does not provide any teaching of ranges for the heat distortion temperatures as recited in claims 10, 12 and 18, though the reference teaches the identical COC

polymers. The heat of distortion for the reference polymers would be expected to be the same.

Neither reference to Oda et al and Otoi et al shows the manufacture of a blister pack, as recited in claim 11.

The references to Yamamoto et al (US 5,783,273) and Hirose et al are both relied upon to show the production of films having the specified thickness employed to form blister packs, as recited in claim 11.

Yamamoto et al show the production of multilayer laminates, suitable to produce blister packs. Note the Abstract. The reference employs the identical monomers as herein claimed. Note column 43 (lines 42-48) which shows a thickness of 150-5,000  $\mu\text{m}$ , clearly within the ranges recited in claims 4 and 15. The reference employs the identical monomers, as herein recited and as taught by Takahashi et al, at column 5 (lines 1 et seq.). The reference shows a glass transition temperature of 30° - 180°C at column 30 (lines 28-36). This high range would also be indicative of a high heat distortion resistance, as recited herein.

The patent to Hirose et al shows the manufacture of multilayer laminates, suitable for the production of blister packs, whose film thickness may be "in the range of 2  $\mu\text{m}$  to 20 mm," which embraces the recitations of claims 4 and 15. Note the Abstract. The reference employs the identical monomers used by Takahashi et al and employed herein. Note column 5 (lines 1 et seq.). The reference teaches a glass transition temperature range of "preferably -10° - 170°C" at column 3 (lines 59-63).

The secondary references and the primary references to Oda et al and Otoi et al all show the use of the identical monomers in the manufacture of the cyclic olefin copolymer. Each shows the production of films. Yamamoto et al and Hirose et al show production of blister packs from such known compositions. Nothing on the record indicates unexpected or surprising results.

### ***Response to Arguments***

Applicant's arguments filed 21 January 2010 have been fully considered but they are not persuasive.

With respect to the rejection of claims 1-4, 7-15, 17, 18 and 22-26 under 35 U.S.C. 103(a) as being unpatentable over Oda et al (US 5,876,814) in combination with Otoi et al (US 6,682,797) in view of Yamamoto et al (US 5,783,273) or Hirose et al (US 5,321,030), applicants argue "Oda teaches the combination of COC with an olefin-based resin takes the form of a COC layer laminated to an olefin-based resin layer... Oda neither teaches nor suggests employing a blend of COC and an olefin-based resin in a single layer." However, the structure taught by Oda et al is not excluded by the language of the claims. Claim 1 does not exclude a laminate structure and does not specify a polymer blend, only that "from 20 to 80% by weight, based on the total weight of the polyolefins (which may be as a laminate structure), of COC," and that the film be "composed of thermoplastic polyolefins." The reference to Oda et al certainly meets those criteria. No recitation of a blend has been provided in the claims.

Applicants failed to address the merits of the supportive references.

With regard to claims 22-24, these claims were inadvertently omitted from the prior Office Action. As such, this action is not being made FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nathan M. Nutter/  
Primary Examiner, Art Unit 1796

nmn

19 February 2010

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